In the Claims:

1.   (currently amended)   A process of design ~~Concrete pavement for highways and streets~~ of the preset strength safety level concrete pavement for highways and streets of the thickness ~~with the thickness determined by results of fatigue analysis which is~~ less by 8-10% than the thickness of this pavement provided by the ~~current~~ Portland Cement Association Bulletin EB109P thickness design procedure ~~due to~~ reduction of thickness being by more complete utilization of flexural strength of concrete considered as a random value than that provided by said ~~the current~~ Portland Cement Association Engineering Bulletin EB109P design practice of utilization of this strength, wherein ~~for carrying out of fatigue analysis of pavement in the framework of said design procedure or with the use of other methods of fatigue analysis according to the requirements of the customer, more complete utilization of flexural strength of concrete considered as a random value means the use of values of modulus of rupture exceeding the mean value of flexural strength for thickness design of pavement,~~ mix design of concrete of pavement being determined by value of modulus of rapture (MR) required by the thickness design according to said ~~design procedure, fatigue analysis of pavement is carried out with consecutive use of few values of modulus of rupture of concrete (MR) considered corresponding to the one value of specified compressive strength of this concrete f_c^1, the least of these few values just corresponding to this value~~ Portland Cement Association Engineering Bulletin EB109P thickness design procedure and equal to the mean value of 28-day flexural ~~specified compressive~~

strength, more complete utilization of flexural strength of concrete is provided by the thickness design of pavement according to the requirements of the customer with the consecutive use of a plurality of values of modulus of rupture of concrete (MR) exceeding the mean value of flexural strength, increase of value of modulus of rupture with the corresponding increase of design strength provides reduction of thickness of pavement, the sufficiency of estimations of thickness of pavement corresponding to these values of modulus of rupture being compared against said Portland Cement Association Engineering Bulletin EB109P thickness design procedure or other methods of thickness design according to the requirements of the customer is the value of modulus of rupture (MR) required by thickness design of this pavement according to said design procedure, any of these few values of modulus of rupture of concrete (MR) can be used for fatigue analysis of pavement of the certain stress ratio factor if strength safety of this pavement designed with the use of this value of modulus of rupture corresponds to preset strength safety of pavement.

Claims 2, 3, and 4 cancelled.

5.   (new)   A process as claimed in claim 1 wherein concrete pavement for highways and streets of uninterrupted traffic flow and high volumes of truck traffic requires the preset strength safety level corresponding to strength safety index . equal at least to about 3 and stress ratio factor not exceeding 0.5, thickness design of pavement is carried out with the consecutive use of the three values of modulus of rupture of concrete (MR) with the difference of 50 psi being considered corresponding to the one value of specified compressive strength of this concrete f_c', the least of these three is the value of modulus of rupture (MR) required according to said Portland Cement Association Engineering Bulletin EB109P thickness design procedure and equal to the mean value of 28-day flexural strength, strength safety of pavement of thickness corresponding to any of these values of modulus of rupture being not less than that corresponding to strength safety index . equal at least to about 3.

6.   (new)   A process as claimed in claim 1 wherein concrete pavement of highways and arterial streets of moderate volumes of truck traffic require the preset strength safety level corresponding to strength safety index . equal at least to about 2.5, thickness design of pavement is carried out with the consecutive use of the three values of modulus of rupture of concrete (MR) with the difference of 50 psi considered corresponding to the one value of specified compressive strength of this concrete f_c', the least of these three is the value of modulus of rupture (MR) required according to said Portland Cement Association Engineering Bulletin EB109P thickness design procedure

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and equal to the mean value of 28-day flexural strength, strength safety of pavement of thickness corresponding to any of these values of modulus of rupture being not less than that corresponding to strength safety index . equal at least to about 2.5.

7.   (new)   A process as claimed in claim 1 wherein concrete pavement of roads, residential streets, and other streets of low volumes of truck traffic require the preset strength safety level corresponding to strength safety index . equal at least to about 2.0, thickness design of pavement is carried out with consecutive use of the three values of modulus of rupture of concrete (MR) with the difference of 50 psi corresponding to the one value of specified compressive strength of this concrete f_c', the least of these three is the value of modulus of rupture (MR) required according to said Portland Cement Association Engineering Bulletin EB109P thickness design procedure and equal to the mean value of 28-day flexural strength, strength safety of pavement of thickness corresponding to any of these values of modulus of rupture being not less than that corresponding to strength safety index . equal at least to about 2.0.

8.   (new)   A process of mix design of concrete of pavement wherein requirements of concrete strength is determined by the value of modulus of rupture (MR) required according to said Portland Cement Association Engineering Bulletin EB109P thickness design procedure and equal to the mean value of 28-day flexural strength, the mean value of flexural strength being estimated as $9.42\sqrt{f_{cr}'}$ where f_{cr}' is the mean value of compressive strength defined according to American building code ACI 318 as required average compressive strength f_{cr}' and equal to $f_c' + 1.34s$ where f_c' and **s** are specified compressive strength and standard deviation of this strength, respectively.

9.   (new)   A process of mix design of concrete of pavement of claim 8 wherein the values of modulus of rupture (MR) equal to 550, 600, 650, 700, and 750 psi being considered corresponding to the values of specified compressive strength fc' equal to 3,000, 3,500, 4,000, 4,500 and 5,000 psi, respectively.